

Delaware Renewable Energy Taskforce Meeting

Delaware Public Service Commission, Hearing Room
861 Silver lake Blvd., Suite 100, Dover, DE 19904

<http://www.dnrec.delaware.gov/energy/information/Pages/RenewableEnergyTaskForce.aspx>

Wednesday, March 23, 2011

9:30am-12:00pm

Welcome and Introductions

All of the documents for today's meeting can be found on the Taskforce website.

Discussion and Presentation: Solar Sub-group presentation and report out on recommendations. Glenn Moore, Delmarva Power

On March 18th the solar sub-group voted on the key attributes of the proposed SREC procurement process. Of the six voting members, 4 voted in favor (Dr. John Byrne, SEU; Glenn Moore, Delmarva Power; Dale Davis, DSEC; and Pat McCullar, DEMEC) and two members abstained (Mark Neilson, Delaware Electric Cooperative and Stephanie McClellan, DNREC).

Throughout the development of the SREC proposed procurement process a variety of stakeholders have participated in the discussions and debate. In addition, 2 independent consultants have assisted the sub-group. Dr. Lado Kurdgelashvili from the University of Delaware, assisted the sub-group with the PV Planner, and Barry Sheingold from New Energy Opportunities, Inc., is a consultant for the DE PSC who has helped the sub-group over the past two months.

Overview of the key attributes found in the document entitled, "Delaware Pilot SREC Procurement Process". The procurement process would be for compliance year 2011, and would be a pilot project. These are the 11 key attributes of the proposed program that the sub-group is asking the taskforce to vote on, so that the process can continue to move forward. Key attributes of interest include: this is a 1 year pilot program, the tiering structure (Tier 1 < to 50kW, Tier 2 50kW to 500kW, Tier 3 500kW to 2MW, and Tier 4 > 2MW), Tiers 1&2 will utilize administratively set pricing to secure SRECs (Tier 1= \$270 first 10 years and \$50 for second 10 years and Tier 2= \$250 for first 10 years and \$50 for the second ten years), Tiers 3&4 will be subject to competitive bidding with a cap of \$280, and there will be contracts to ensure the program is administered effectively.

Overview of the PV Planner model, information can be found in the document entitled, "PV Planner Overview and Key Inputs". The University of Delaware, Center for Environment and Energy Policy developed this model and it was run numerous times with 1000s of variables. The 20 most significant variables were discussed as were the results of the inputs. Tier 1 there is a 10.23 year payback period and Tier 2- the IRR is 11.69%.

Overview of the structural design, information can be found in the document entitled, “Pilot Program Structural Design, and PV Planner Inputs”. The tier definition was a balancing act between capturing the mandates in the legislation, price, experience from the utilities and experts around the table, and Delaware’s renewable market. There is no standard way to defining the tiers. Tier 1 is the only grant that is eligible for the state grants, there is a significant amount of pent up demand in this tier, this tier will be fully subscribed quickly, and this Tier will provide approximately 13.4% of the SREC market. Tier 2 is design for systems that are 50KW to 500kW, this tier has administrative pricing to all for all players to have a chance at the market, and this tier will provide approximately 18.2% of the SREC market. Tier 3 are characterized as large installations, this tier will provide approximately 20.4% of the SREC market, there are many of these systems planned throughout the state, and this tier doesn’t have as much job growth, but does have significant investment. Tier 4 is the large utility scale solar projects, for this procurement process the Dover SunPark will fulfill all the SREC requirements for this tier approximately 48% of the SREC procurement.

Overview of job creation, economic and investment potential, information can be found in the document entitled, “Job Creation, Economic and Investment Potential”. The sub-group provided a brief overview of the job creation and investment potential for each tier. They pulled their research from three sources including NREL’s JEDI model, Delmarva Power and the Delaware Solar Energy Coalition.

Overview of the customer bill impacts for Delmarva Power Customers, information can be found in the document entitled, “Delmarva Solar Supply Costs CY2011”. Glenn Moore provided an overview of the estimated rate impacts on Delmarva customers for the 2011 compliance year. The break down included information on the costs of the total SREC supply, customer rate impacts per month, and percent impact on customer bills. Glenn also provided an overview of the banking provisions and how banking impacts the prices.

Next steps: The taskforce will be asked to take a vote. After the vote, if it is to move forward, the sub-group will continue to work on the details of the process, they will develop communications documents to describe the process, begin development of all the contracts that will be necessary for the process, and begin preparing for the additional regulatory processes.

Sub-group Comment

Dale Davis, DSEC- This was a complex process which has taken lots of work and research. We feel that it’s important to get away from the grant system, this is a performance based system. It’s important to be paid for what you produce. The negative cash flow is a challenge and we will continue to look at the pricing, financing, and how to continue moving these projects forward. All of tiers are expected to be fully subscribed. Some projects will not move forward. This is 1/6 of the total amount of SRECs required by the State of Delaware. Keep in mind that the numbers will continue to grow, as will the investment and job growth.

Taskforce Comment

Carolyn Snyder, Chair- Hold vote until April 13 to allow for the public to have ample time to review the documents.

Glenn Moore, Delmarva- The sub-group will continue to work on defining the details of the program and next steps.

Stanley Merritt, DuPont-This was a detailed review and no additional comments.

Tom Noyes, Environmental Advocate- Question about the PV Planner outputs for Tier 2. In year 13 the price drops back into the red, why?

Dale Davis, DSEC- The drop in price is to account for an inverter replacement.

Andrea Maucher, DE Public Advocate- The graphs in the PV Planner continue past year 20, why is that?

Dale Davis, DSEC- What you are seeing is the value of the offset costs of electricity.

Carolyn Snyder, Chair- The 1 year pilot allows us to learn and adjust. The numbers presented in year one are not sustainable and they will need to change in the coming years.

Glenn Moore, Delmarva- The banking concept; for this year we will have more supply than demand. However, in 2016 or 1027 we will be on the other side of that equation. Also, some systems may not fully produce in time for 2011 compliance year.

Pam Knotts, DE PSC- Will the SEU charge for banking the SRECs? A financing charge?

Glenn Moore, Delmarva- There are two charges; a banking charge and an administration charge. The down side of banking is the charge, which will be realized when the SREC is retired. There are no charges for CY2011.

Glenn Moore, Delmarva- Customers have banking rights, Delmarva Power has the ability to bank for 3 years, but the SEU can bank indefinitely. If Delmarva doesn't use the SREC within the timeframe, then they expire and cannot be used. The SOS costs still need to be worked out if the costs are passed on at the time of payment of SRECs or the retirement of SREC. Delmarva will work with the PSC on this, Delmarva is starting down the path of having the costs at the time of retirement, although this is not official.

Mark Neilson, DEC- What is the vote on exactly? I don't want to vote on a Delmarva business decision that should be between Delmarva and the PSC.

Carolyn Snyder, Chair- The vote is on the one pager that contains the 11 key attributes, which does not speak to the specific banking decisions that Delmarva can make. The numbers on

the one pager are for Delmarva SOS only. All of this will still need to go through the relevant regulatory bodies for approval.

Glenn Moore, Delmarva- The vote should be on the tiering and not the SREC amounts that we will move forward to the PSC. The final vote is about the general process and allocations, not about the decision of Delmarva to purchase a certain amount of SRECs and potentially bank a certain amount of SRECs. The latter is a business decision of Delmarva and not a policy decision for the taskforce.

Public Comment

Ray Maleniant, Maryland, De.- Has a solar array for about 16 months and is pleased with the system. I support the continuance of some form of the rebates and Delaware's energy policies. I want to get clarification on the possible repeal of the RPS and if it is true. Supports the federal tax credit and local incentive, and if these two programs cease, the overall public benefit is diminished. Renewable resources are the best hope for the future.

Brian Holleger- Has an array that was installed in October. The rebates/grants were critical for us to get the array installed, I support the continuance of the state grant program. If the overall goal is to have energy that is clean and non-polluting, then the grants have to stay. We need to have a goal of keeping the rebates, keep the SREC prices high and keep renewable energy attractive to residents of Delaware.

John Nichols- Renewable energy resources are not reliable sources of energy. They take up more space and they provide less jobs than other forms of energy. Studies from across the country have shown that renewable energy jobs are a net loss, not gain. I would like to have access to the footnotes that were cited on the Job Creation, Economic and Investment Potential handout. Spain lost 2.2 jobs for every green job created. Other examples include Germany and Italy. Lastly, anyone who has solar panels on their house and received a grant is being subsidized by me, and I do not approve of that.

Pat Coluzzi, Vice Mayor of Rehobeth Beach, Delaware- I want to offer support for the RPS and want it to continue to move forward. Rehobeth Beach is moving forward on installing solar panels throughout the town. Green energy is an important part of the economy. We need to do this for our children and the people of Delaware. The coal fire generation facilities in Delaware are causing illness to the residents of Delaware.

John Sertich, CEUSA- I have some questions. The maintenance agreements are for the full 20 years. I would like to see the details of the maintenance agreement fully flushed out. How will the contract be written to ensure that if maintenance costs can keep up with the SREC prices? What if the SREC prices are lower than the maintenance costs? Additionally, what happens between

when the project starts and when it's approved? Will there be a prioritization for moving projects into the next year (i.e. what if someone doesn't get into that year's program, what happens to them the next year)? What if there is a delay in the program, how will that be built into the contract?

Dave Stevenson , Caesar Rodney Institute- We have completed studies on recent installer's bids. It was with 8 contracts with 6 installers. The PV Planner model looks great, but this is not the model that the installers use with meeting with residents. They have an industry model that when \$270/SREC is plugged in, shows a 5 year payback and a 20% IRR. \$270/SREC is too high and too generous. To match numbers, taskforce numbers need to be lower for the SRECs. Installers are quoting a \$300/SREC price on the spot market. There should be a bigger difference between the spot market and the administrative price. The contract period is too long. Europe example, when electricity prices increased, there was a blow back from residents and then there was policy change. From my evaluation of Delaware's program, it appears that we will be at that point around 2016.

BJ Vinton- I've been following the efforts of the sub-group. I complement the efforts and work that they have put into the process. I wanted to raise concerns about the price tiers of \$270 and \$250. From my perspective, they appear too low and could stunt the growth of Delaware's solar industry. The ten year pay-back also makes it difficult. I do respect the process and commend the work of the sub-group, but wanted to state my concerns.

Peter Olmsted, Vote Solar Initiative- I wanted to provide some feedback and comments on the jobs and economic development comment. I welcome conversation about Vote Solar's analysis and upcoming presentation. For some background on Vote Solar, we are a 501.c.3 that works across the country promoting and advocating for solar. We work in the regulatory process, legislative process, and we advocate. We used the JEDI model that was created by NREL and funded by DOE. We have used this method across the country and we believe that this model has a good economic foundation. I will be happy to answer any questions and will be giving a full presentation at the April Taskforce meeting.